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The Indochina Entomologist
OPEN ACCESS
New Taxon
ICE. 1 (5): 27–34 (2024)
ISSN (Online) 3065-1107
www.indochinaentomologist.com

https://doi.org/10.70590/ice.2024.01.05
http://zoobank.org/urn:lsid:zoobank.org:pub:44D6992D-33E2-4EE5-9E2B-FBF03656B693

A new species of the genus *Thelcticopis* Karsch, 1884 (Araneae: Sparassidae: Sparianthinae) from Guangdong, China

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Abstract: A new species of the genus *Thelcticopis* Karsch, 1884 is described from Guangdong Province, China: *T. recta* **sp. nov.** (♂, ♀). Diagnosis, morphological description, photos and distribution map of the new species are provided. Specimens are deposited in the Centre for Behavioral Ecology and Evolution, College of Life Sciences, Hubei University in Wuhan.

Keywords: Biodiversity, huntsman spiders, morphology, taxonomy

中国广东省塞蛛属一新种（蜘蛛目：巨蟹蛛科）

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摘要：本文报道了产自中国广东省的塞蛛属 *Thelcticopis* Karsch, 1884 一新种：直塞蛛 *T. recta* **sp. nov.**，并提供了该新种的鉴别特征、形态描述、照片和分布图。标本保存于湖北大学生命科学学院行为生态与进化研究中心。

直塞蛛 *Thelcticopis recta* sp. nov.（图 1–4）

模式标本：正模：♂，**中国广东省：**惠州市龙门县南昆山，23°36’53”N，113°51’53”E，海拔 743 米，2023 年 6 月 17 日，林小莉采。**副模：**1♀，采集信息同正模；1♀，采集地与采集人同正模，2023 年 4 月 9 日；1♀，广州市增城区正果镇畲族村，23°20’27”N，113°59’08”E，海拔 347 米，2023 年 1 月 4 日，林小莉采；1♂，中山市五桂山，22°27’14”N，113°23’11”E，海拔 136 米，2019 年 6 月 27 日，胡昌昊采。

鉴别特征：该新种雄性与 *T. bicornuta* Pocock, 1901 在以下特征相似：1. 后侧胫节突中部有一簇粗壮的刚毛；2. 盾片突起始于膜质结构，但可根据以下特征进行区分：1. 该新种插入器直，而 *T. bicornuta* 弯曲；2. 该新种后侧胫节突端部前侧面有一个缺刻，而 *T. bicornuta* 无缺刻；3. 该新种后侧胫节突端部无刚毛，而 *T. bicornuta* 后侧胫节突端部后侧面有两根弯曲的刚毛。该新种雄性还与离塞蛛 *T. severa* (L. Koch, 1875)

Accepted by Ye-Jie LIN: 25.X.2024; published online: 25.X.2024

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在以下特征相似：插入器基部具一片状插入器突，但可根据其与 *T. bicornuta* 相同的鉴别特征进行区分。该新种雌性与 *T. picta* (Thorell, 1887) 在以下特征相似：1. 中隔前宽后窄；2. 纳精囊长度约等于交媾管长度，但可根据以下特征进行区分：1. 该新种中隔倒三角形，前缘不明显，而 *T. picta* 中隔 Y 字形，前缘明显；2. 该新种外雌器无中纵脊，而 *T. picta* 具中纵脊；3. 该新种纳精囊与交媾管宽度近似相等，而 *T. picta* 纳精囊明显宽于交媾管。

地理分布：中国（广东）。

关键词：生物多样性，巨蟹蛛，形态学，分类学

Citation: Hu C-H & Liu J 2024: A new species of the genus *Thelcticopis* Karsch, 1884 (Araneae: Sparassidae: Sparianthinae) from Guangdong, China. *The Indochina Entomologist*, 1 (5): 27–34. [胡昌昊 & 刘杰 2024: 中国广东省塞蛛属一新种（蜘蛛目：巨蟹蛛科）. 中南半岛昆虫学家, 1 (5): 27–34.]
https://doi.org/10.70590/ice.2024.01.05

Introduction

The genus *Thelcticopis* Karsch, 1884 is a small genus of the family Sparassidae with 53 known species (World Spider Catalog, 2024). *Thelcticopis* species are medium to large spiders, they mainly inhabit bush, tree bark and leaf litter, and distribute in tropics of Africa, Asia and Oceania. However, Sankaran et al. (2024) considered that African *Thelcticopis* species do not truly belong this genus. Six *Thelcticopis* species have been recorded in China: *T. chongzu* Lin & Li, 2024 (Yunnan), *T. dahanensis* Zhu & Zhong, 2020 (Taiwan), *T. pinmini* Cai & Zhong, 2021 (Guangxi), *T. severa* (L. Koch, 1875) (Southern China), *T. unciformis* Zhu & Zhong, 2020 (Taiwan), and *T. zhengi* Liu, Li & Jäger, 2010 (Yunnan) (Liu et al. 2010; Zhu et al. 2020; Cai et al. 2021; Lin et al. 2024). For Chinese *Thelcticopis*, males having short and thick tibia, curved tegular apophysis and complicated retrolateral tibial apophysis; females having median septum and irregular spermatheca (Zhu et al. 2020). The present paper reports one new *Thelcticopis* species from Guangdong Province, China.

Material and methods

The specimens examined in this study were deposited in the Centre for Behavioral Ecology and Evolution, College of Life Sciences, Hubei University in Wuhan. Specimens were examined using Phenix XTL-165 stereo microscope. Photographs were taken with a LEICA M205 C stereo microscope. All morphological measurements were calculated using a LEICA M205 C stereo microscope. The male palp was examined and photographed after dissection. The epigyne was examined after being dissected from the spider's body. The epigyne was removed and treated in a warmed 0.1 mg/ml Protease K solution before study. Eyes diameters were taken at the widest point. Legs measurements were given as total length (femur, patella, tibia, metatarsus, tarsus). Spination follows that given in Davies (1994). The terminologies used in text and figures follow Sankaran et al. (2024). All measurements were in millimeters (mm).

Abbreviations: **ALE**–anterior lateral eyes; **AME**–anterior median eyes; **Fe**–femur; **Mt**–metatarsus; **Pa**–patella; **PLE**–posterior lateral eyes; **PME**–posterior median eyes; **Ti**–tibia; **I, II, III, IV**–legs I to IV.

Taxonomy

Family Sparassidae Simon, 1881 巨蟹蛛科
Subfamily Sparianthinae Simon, 1897 斯帕蛛亚科
Genus *Thelcticopis* Karsch, 1884 塞蛛属

Type species. *Thelcticopis severa* (L. Koch, 1875).

***Thelcticopis recta* sp. nov. 直塞蛛**

https://zoobank.org/AAC95762-2B02-4D9F-9D4B-2DAAD76FC7B6

Figs 1–4

Type material. Holotype: ♂, **CHINA, Guangdong Province:** Huizhou City, Longmen County, Nankun Mountain 23°36'53"N, 113°51'53"E, elev. 743 m, 17 June 2024, Xiao-Li Lin leg. **Paratypes:** 1♀: with same data as holotype; 1♀, with same locality as holotype, but 9 April 2023; 1♀, Guangzhou City, Zengcheng District, Zhengguo Town, Shezu Village 23°20'27"N, 113°59'08"E, elev. 347 m, 4 January 2023, Xiao-Li Lin leg.; 1♂, Zhongshan City, Wugui Mountain 22°27'14"N, 113°23'11"E, elev. 136 m, 27 June 2019, Chang-Hao Hu leg.

Etymology. The specific name is a Latin word "*rectus*", meaning straight, derived from the straight embolus of male palp.

Description. Male: Prosoma 6.02 long, 5.26 wide. Opisthosoma 6.32 long, 4.23 wide. Eyes: AME 0.33, ALE 0.26, PME 0.23, PLE 0.24, AME–AME 0.31, AME–ALE 0.22, PME–PME 0.58, PME–PLE 0.52, AME–PME 0.31, ALE–PLE 0.26. Spination: Palp: 131, 101, 3008; Fe: I 322, II 112, III 322, IV 311; Pa: I–IV 000; Ti: I 212(10), II 1026, III 2126, IV 2125; Mt: I 2022, II 1022, III 2012, IV 3034. Measurements of palp and legs: Palp 6.05 (1.99, 0.67, 1.04, –, 2.35), I 20.26 (5.77, 2.44, 5.98, 4.70, 1.37), II 17.31 (5.26, 1.92, 4.85, 4.02, 1.26), III 14.76 (4.70, 1.98, 3.70, 3.19, 1.19), IV 19.62 (5.68, 2.01, 5.01, 5.27, 1.65). Leg formula: I-IV-II-III. Cheliceral furrow with three anterior and five posterior teeth.

Palp: Retrolateral tibial apophysis strongly curved, with bunch of ten setae and a notch. Cymbium approximately 1.5 times longer than tibia. Spermophor oval in ventral view. Tegular apophysis finger-shaped and curved, originating from a membrane. Distal conductor triangular. Embolus straight, with a lamellar embolic apophysis on basal embolus (Fig. 2A–D).

Colouration: Dorsal prosoma brown, with golden hairs. Chelicerae dark brown. Sternum yellowish brown, with brown margin. Endites and labium deep brown, with yellow distal part. Legs brown to orange. Dorsal opisthosoma with inverted V-shaped yellow patterns in posterior half. Ventral opisthosoma with a trapezoidal dark brown pattern (Fig. 2E, F).

Female: Prosoma 6.93 long, 5.65 wide. Opisthosoma 6.41 long, 4.55 wide. Eyes: AME 0.35, ALE 0.27, PME 0.23, PLE 0.27, AME–AME 0.34, AME–ALE 0.44, PME–PME 0.68, PME–PLE 0.79, AME–PME 0.31, ALE–PLE 0.34. Spination: Palp: 131, 101, 3120, 3030; Fe: I 313, II–III 322, IV 321; Pa: I–IV 000; Ti: I–II 000(10), III 1006, IV 2026; Mt: I–II 0002, III 1002, IV 2024. Measurements of palp and legs: Palp 6.69 (2.07, 0.91, 1.56, –, 2.15), I 17.96 (5.09, 2.46, 5.06, 3.99, 1.36), II 17.30 (5.33, 2.30, 4.70, 3.67, 1.30), III 13.38 (4.42, 1.65, 3.44, 2.65, 1.22), IV 17.47 (5.25, 1.74, 4.41, 4.44, 1.63). Leg formula: I-IV-II-III. Cheliceral furrow with three anterior and five posterior teeth.

Epigyne: Epigynal field as long as wide. Anterior part of lateral lobes narrower than posterior part. Median septum inverted triangular, with indistinct anterior margin. Copulatory ducts S-shaped and strongly sclerotized. Spermathecae as long as copulatory ducts, wider than copulatory ducts and terminal part touching with copulatory ducts. Fertilization ducts narrow, short and laterad (Fig. 3A, B).

Colouration: As in male, generally darker (Fig. 3C, D).

Differential diagnosis. Males of *T. recta* **sp. nov.** are similar to those of *T. bicornuta* Pocock, 1901 (cf. Fig. 2A–D vs. Fig. 5A, B in Sankaran *et al*. 2024) in having a bunch of strong setae arising from the medial part of retrolateral tibial apophysis, and the tegular apophysis originating from a membrane, but can be distinguished from *T. bicornuta* by 1. embolus straight (vs. curved in *T. bicornuta*); 2. prolateral tip of retrolateral tibial apophysis with a notch (vs. absent in *T. bicornuta*); and 3. tip of retrolateral tibial apophysis without setae (vs. present in *T. bicornuta*). Males of *T. recta* **sp. nov.** are also similar to that of *T. severa* (L. Koch, 1875) (cf. Fig. 2A–D vs. Fig. 2A–D in Zhu *et al*. 2020) in having a lamellar embolic apophysis, but can be distinguished by the same diagnostic characters as *T. bicornuta*. Females of *T. recta* **sp. nov.** are similar to those of *T. picta* (Thorell, 1887) (cf. Fig. 3A,

FIGURE 1. Living female *Thelcticopis recta* **sp. nov.**

B vs. Fig. 16A–D in Sankaran *et al*. 2024) in having a median septum with posterior part distinctly narrower than anterior part, and the length of spermathecae almost same as copulatory ducts, but can be distinguished from *T. picta* by 1. middle septum inverted triangular, with indistinct anterior margin (vs. middle septum Y-shaped, with distinct anterior margin in *T. picta*); 2. median longitudinal ridge of epigyne absent (vs. present in *T. picta*); and 3. width of spermathecae almost same as copulatory ducts (vs. width of spermathecae wider than copulatory ducts in *T. picta*).

Distribution. China (Guangdong) (Fig. 4).

FIGURE 2. *Thelcticopis recta* **sp. nov.**, male: **A** left palp, prolateral view **B** same, ventral view **C** same, retrolateral view **D** left palpal tibia, retrolateral view **E** habitus, dorsal view **F** same, ventral view. **Abbreviations:** C–conductor, E–embolus, EA–embolic apophysis, RTA–retrolateral tibial apophysis, Sp–spermophor, TA–tegular apophysis. Scale bars: 0.5 mm (A–D), 2 mm (E–F).

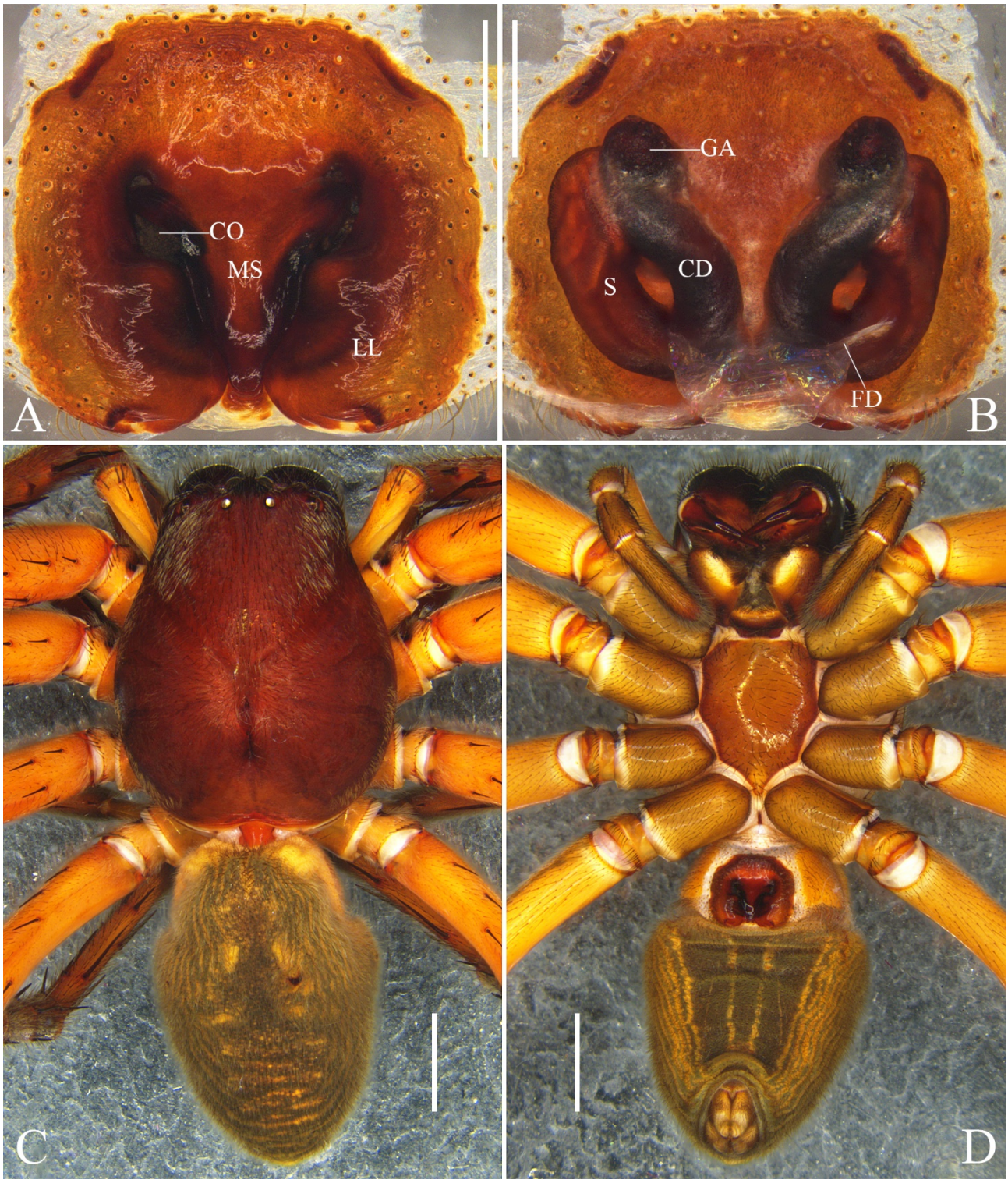

FIGURE 3. *Thelcticopis recta* **sp. nov.**, female: **A** epigyne, ventral view **B** vulva, dorsal view **C** habitus, dorsal view **D** same, ventral view. **Abbreviations:** CD–copulatory duct, CO–copulatory opening, FD–fertilization duct, GA–glandular appendage, LL–lateral lobe, MS–median septum, S–spermatheca. Scale bars: 0.5 mm (A–B), 2 mm (C–D).

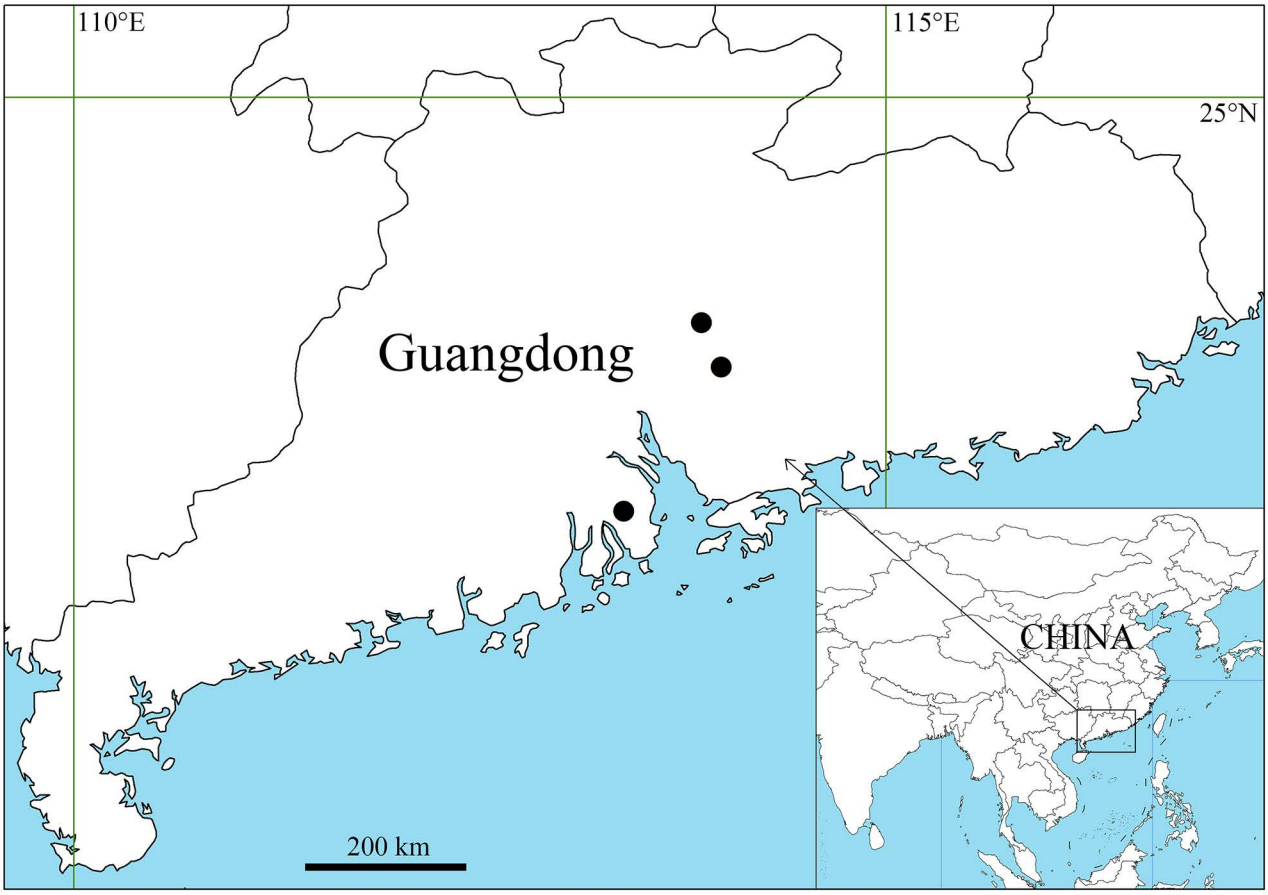

FIGURE 4. Collection localities of *Thelcticopis recta* **sp. nov.**

Acknowledgements

We thank to Xiao-Li Lin (Guangzhou, China) and Yun-Shan Yang (Beijing Jiaotong University, China) for providing specimens. We also thank Dr. Shuang Qiu (Hubei Broad Nature Technology Service Co., Ltd, Wuhan, China) for helping raise spiders. The manuscript benefited from comments by the subject editor Ye-Jie Lin (Imperial College London, United Kingdom).

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Additional information

Author contributions: Conceptualization, Resources, Visualization, Writing–original draft, Writing–review and editing: C-H Hu & J Liu.

Conflict of interest: The authors have declared that no competing interests exist.

Data availability: All of the data that support the findings of this study are available in the main text.

Ethical statement: No ethical statement was reported.

Funding: This study was self-funded by the authors.

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